My Name is Bill Noyce, and I hold Amateur license AB1AV. I believe the Commission should continue to require that applicants for the Amateur Extra license should pass a Morse code receiving examination, because doing so better supports the aims and purposes of the Amateur Service.

Because of its narrow bandwidth, Morse code enables communication in the presence of noise far better than voice modes – or, equivalently, requires far less power to achieve the same communication. Some narrow-bandwidth digital modes are also excellent by this measure, but they require a computer for sending and receiving.

The simplicity of Morse code means that simple equipment can be used successfully for sending and receiving it. Simple and efficient class C and class E amplifiers can be used in a Morse code transmitter, whereas SSB and digital modes require linear amplifiers that are less efficient or far more complex (or both).

Because of its low power requirements and simple equipment, dedicated Morse code equipment is well-suited to certain kinds of emergency communications. A given weight of batteries, or of gasoline for a generator, will support much more Morse code communications than voice communications. While voice modes can transmit tactical messages more quickly, Morse code traffic nets have proved to be quicker for transmitting written record traffic (contrary to the statement in the NPRM at paragraph 20).

Granted that Morse code has unique advantages, why should the Commission require those holding the highest class of Amateur license to demonstrate an ability to use it? Retaining such a requirement promotes the aims and purposes of the Amateur Service in the following ways:

(a) Recognition and enhancement of the value of the Amateur Service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.

As discussed above, Morse code proficiency improves an Amateur's ability to provide emergency communications in the face of limitations on power, antenna efficiency, portability, etc.

(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.

As Amateurs push toward higher frequencies, Morse code is often the first mode used at a given frequency, because of its simplicity and effectiveness when equipment is marginal. Experimenters who are not

comfortable with Morse must expend effort on aspects of their equipment other than what they are studying.

(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art.

The written exam for the Amateur Extra license covers the technical phase of the art well, but in the absence of a Morse code exam, there would be very little to encourage advancing skills in the communication phase. Many Morse code enthusiasts say they would never have started if they were not required to learn Morse code for a license.

(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

Building a Morse code transmitter or transceiver from a kit is often the first experience an amateur gets with hands-on work with electronics. Many go on to design and build more complex equipment, but would not have started if the initial project were too complicated. The effectiveness of low power makes it safe and inexpensive to experiment with Morse code gear.

(e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

Many amateurs operate stations that can easily make international contacts with Morse code, but can only rarely make voice contacts. Morse code – essentially written communication – also tends to be more effective than voice when the parties do not share a native language.

In summary, Morse code makes a unique contribution in each of these areas. While it is appropriate now to allow Amateurs access to the HF bands without demonstrating Morse code proficiency, the requirement should remain for the Amateur Extra class. Otherwise this class will no longer represent the level of skill that others can depend upon.

Equipment for sending and receiving Morse code can be very simple, and makes an excellent introduction to kit-building or home-brewing of radio equipment. By contrast, a simple SSB transceiver makes a rather intimidating starting point.